

**CRAB ORCHARD NATIONAL WILDLIFE REFUGE CERCLA PROJECT  
MONTHLY PROGRESS REPORT  
SEPTMEBER 2017**

**ADDITIONAL AND UNCHARACTERIZED SITES  
OPERABLE UNIT (AUS OU)**

**1.0 Actions toward Achieving Compliance**

*Feasibility Study (FS).*

FWS continues to provide technical direction to Shannon and Wilson (S&W) on the draft pilot FS. The draft pilot includes a comparative analysis of alternatives for AUS Sites 0001, 0002, 0060, and 0A2B. Shannon & Wilson submitted preliminary documents regarding the second draft FS Pilot revision to FWS for review on September 6<sup>th</sup> and 8<sup>th</sup>. Shannon & Wilson submitted a second draft FS pilot to FWS on September 30th.

*Natural Attenuation in Groundwater Work Plan and Quality Assurance Project Plan (QAPP) Addendum.*

FWS submitted the revised Natural Attenuation in Groundwater QAPP Addendum to the Agencies on August 3<sup>rd</sup>. The QAPP detailed the approach to collect additional data regarding natural attenuation processes in selected contaminated groundwater plumes at the AUS OU. The purpose of the data collection is to further inform alternative analysis in the FS. Comments were received from USEPA on the revised QAPP on September 21st.

*Sewer Line Vapor Threat Evaluation of Area 11.*

An evaluation was conducted for Area 11 to determine whether the abandoned sewer line system is acting as a potential conduit for migration of contaminated vapors and/or groundwater plumes to other areas on the Refuge. Soil gas samples confirmed vapors within the abandoned sewer line near AUS OU A11S. A technical memo is being prepared.

*Radiological Surveys.*

Depleted uranium was historically used on-site. Groundwater from select wells and surface water at AUS Sites 0A2D, 0A09, 0A10, A11, and 0A12 during July, 2017. Some radioisotopes were detected at some locations slightly above reference stations for the survey. A report is being prepared to summarize the results of testing for radiological contamination.

*Draft Evaluation of Future Groundwater Risk*

FWS submitted the draft Evaluation of Future Groundwater Risks to the Agencies and Shannon & Wilson on September 25<sup>th</sup>. The risk assessment was designed to augment the human health risk assessment and the ecological risk assessment. The results indicated risks for human and ecological receptors and pathways related to potable and non-potable uses associated with the purposes of the Federal facility including conservation, recreation, industrial, and agricultural. The risk information supplements the applicable ARAR for the State promulgated groundwater quality standards that are mostly related to protecting potable uses.

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*Time Critical Removal Action for Building S-2-5*

FWS issued an Action Memo, dated September 22<sup>nd</sup>, for a time critical removal action for Building S-2-5 to secure the building to mitigate the threat of further releases of hazardous substances into the environment from the interior of a building and to prevent access to the site. Concentrations of heavy metals in the dust in the interior of the building and in soils are above thresholds that pose risks to human health and the environment. The response action includes inspection of the building integrity, closure of drain holes and openings in exterior walls, boarding of windows, installation of fence and signage, and continued access restrictions. On-site activities will begin October 2<sup>nd</sup>.

*Public Involvement Activities*

FWS published a legal notice in the Southern Illinoisan on September 3<sup>rd</sup> announcing the availability of the Administrative Records for the AUS OU, Area 7 Pesticide Area Site, and Building S-2-5 in Area 4 West. FWS continues to update the Community Involvement Plan.

**2.0 Status/Results of Sampling, Tests, and Other Data**

Soil gas samples were collected for VOC analyses and groundwater and surface water samples were collected for radiological testing the week of July 17<sup>th</sup>.

**3.0 Actions Scheduled for Next Month**

- Revise the AUS 0001 Technical Memo.
- Prepare technical memo for the sewer line vapor threat evaluation and radiological survey.
- Continue to provide technical direction to S&W on preparation of the FS.
- Implement the Time Critical Response Action for Building S-2-5.
- Update the Community Involvement Plan.

**4.0 Modification or Delays Encountered or Anticipated**

None to report.

**5.0 Other Significant Activities**

None to report.

**6.0 Personnel Changes**

Beginning October 1<sup>st</sup>, FWS has retained technical services from SRS for technical review of the FS. AECOM will provide technical assistance for ecological and groundwater risk.

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**AREA 7 PESTICIDES NON-TIME CRITICAL REMOVAL ACTION  
ENGINEERING EVALUATION / COST ANALYSIS (EE/CA)**

**1.0 Actions toward Achieving Compliance**

*EE/CA Report*

FWS continues to provide technical direction to TRC on preparation of the draft EE/CA. TRC worked on responses to Agency comments from the USEPA, IEPA, and USACE. A conference call was held on September 25<sup>th</sup> with the risk assessors to discuss issues raised during the August 17<sup>th</sup> meeting with USEPA and Illinois EPA regarding Agency comments on the EE/CA.

*Public Involvement Activities*

FWS published a legal notice in the Southern Illinoisan on September 3<sup>rd</sup> announcing the availability of the Administrative Records for the AUS OU, Area 7 Pesticide Area Site, and Building S-2-5 in Area 4 West. FWS continues to update the Community Involvement Plan. The draft plan will be distributed to the Agencies for review in the fall.

**2.0 Status/Results of Sampling, Tests, and Other Data**

None to report.

**3.0 Actions Scheduled for Next Month**

- TRC continues to revise the EE/CA to address Agency comments.
- FWS will update the Community Involvement Plan.

**4.0 Modification or Delays Encountered or Anticipated**

Agency comments which re-consider risk assessment assumptions previously vetted will result in delay of completion of the EE/CA Report.

**5.0 Other Significant Activities**

None to report.

**6.0 Personnel Changes**

Beginning October 1<sup>st</sup>, FWS has retained technical services from SRS for technical review of the EE/CA.